

IN THE CLAIMS:

Please amend Claims 1 to 6, 12 and 15, as follows.

1. (Currently Amended) An image pickup apparatus comprising:
first and second image pickup portions for receiving at least a first
wavelength component of object light and a second wavelength component of the object
light different from the said first wavelength component, respectively; and
first and second optical systems for guiding the said first and second
wavelength components of the object light to be received by said first and second image
pickup portions to said first and second image pickup portions, respectively, via different
optical paths, said first and second optical systems being formed to have respective shapes
so constructed such that the focal length of said first optical system with regard to the said
first wavelength component is equal to the focal length of said second optical system with
regard to the said second wavelength component.

2. (Currently Amended) An image pickup apparatus according to
claim 1, wherein the said first wavelength component is a representative wavelength of
light of a first spectral distribution and the said second wavelength component is a
representative wavelength of light of a second spectral distribution which is different from
the said first spectral distribution.

3. (Currently Amended) An image pickup apparatus according to
claim 2, wherein the said first spectral distribution is a spectral distribution including peak
wavelength of a luminosity factor.

4. (Currently Amended) An image pickup apparatus according to claim 1, wherein the said first wavelength component is included in a spectral distribution including peak wavelength of a luminosity factor.

5. (Currently Amended) An image pickup apparatus according to claim 1, wherein the said first and second wavelength components are two different color components among red, green, and blue.

6. (Currently Amended) An image pickup apparatus according to claim 1, wherein each of said first and second optical systems comprises a filter for respectively extracting the said first and second wavelength components.

7. (Original) An image pickup apparatus according to claim 1, wherein each of said first and second optical systems comprises a single lens.


8. (Original) An image pickup apparatus according to claim 7, wherein said single lenses of said first and second optical systems are integrally formed of a glass material or a resin material.

9. (Original) An image pickup apparatus according to claim 8, further comprising:

a light shielding layer provided between said integrally formed single lenses.

10. (Original) An image pickup apparatus according to claim 1, wherein each of said first and second optical systems comprises a single lens provided with an infrared radiation cutting filter.

11. (Original) An image pickup apparatus according to claim 1, wherein each of said first and second optical systems comprises photochromic glass.

 12. (Currently Amended) An image pickup apparatus according to claim 1, wherein said first and second optical systems comprise ~~comprises~~ filters for extracting the ~~said~~ first wavelength component and the ~~said~~ second wavelength component, respectively.

13. (Original) An image pickup apparatus according to claim 1, wherein each of said first and second optical systems comprises a color purity correction filter.

14. (Original) An image pickup apparatus according to claim 1, wherein each of said first and second optical systems comprises a filter whose transmission factor becomes smaller as the distance from the optical axis thereof becomes longer.

15. (Currently Amended) An image pickup apparatus according to claim 1, wherein, when a virtual object distance D [m] is defined as a function of an image pickup angle θ [°] of said first or second optical systems to be $D = 1.4 / \tan (\theta/2)$, an interval between optical axes of said first and second optical systems is set such that a change in an interval between an object image of the ~~said~~ first wavelength component received by said first image pickup portion and an object image of the ~~said~~ second wavelength component received by said second image pickup portion between when an

object exists at the said virtual object distance and when the object exists at infinity is smaller than a pixel pitch of said image pickup portions multiplied by two.

16. (Original) An image pickup apparatus according to claim 1, wherein said first and second image pickup portions are integrally formed.

17. (Original) An image pickup apparatus according to claim 1, wherein said first and second image pickup portions are formed in a plane shape.

18. (Original) An image pickup apparatus according to claim 1, further comprising:

a plurality of openings for taking in external light through said first and second optical systems.
